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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,255	04/26/2001	Yoshihiro Kayano	2001_0474A	7526

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WASHINGTON, DC 20006-1021

EXAMINER

FONTAINE, MONICA A

ART UNIT	PAPER NUMBER
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1732

6

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/842,255

Applicant(s)

KAYANO ET AL.

Examiner

Monica A Fontaine

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-- Th MAILING DATE of this communication appears on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-18 is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Applicant's election of claims 5-18 in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Vecchiarino et al. (U.S. Patent 5,99,385).

Regarding Claim 5, Vecchiarino et al., hereafter "Vecchiarino," show that it is known to carry out a method for injection-molding a molded article having a hollow portion by means of an injection-molding apparatus (Column 2, lines 26-34) comprising a mold assembly having a first molten resin injection portion for injecting a first molten thermoplastic resin into a cavity of

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the mold assembly (Column 4, lines 36-47), a second molten resin injection portion for injecting a second molten thermoplastic resin into the cavity (Column 4, lines 36-47), and a pressurized fluid introducing portion for introducing a pressurized fluid into the second molten thermoplastic resin injected into the cavity (Column 3, lines 21-22), and a first injection cylinder communicating with the first molten resin injection portion and a second injection cylinder communicating with the second molten resin injection portion (Column 4, lines 40-47), the method comprising the steps of injecting the first molten thermoplastic resin from the first injection cylinder into the cavity through the first molten resin injection portion (Column 6, lines 9-11), initiating the injection of the second molten thermoplastic resin from the second cylinder into the cavity through the second injection portion, without bringing the second molten thermoplastic resin into contact with the first molten thermoplastic resin injected into the cavity after the completion of the injection thereof (Column 2, lines 9-12; Column 6, lines 11-14), and introducing the pressurized fluid into the second molten thermoplastic resin in the cavity from the pressurized fluid introducing portion after completion of injection thereof to, thereby to form the hollow portion inside the second thermoplastic resin (Column 3, lines 21-29; Column 6, lines 53-61).

Regarding Claim 6, Vecchiarino shows the process as claimed as discussed above, including a method in which the first thermoplastic resin is in a molten state when the first thermoplastic resin comes in contact with the second molten thermoplastic resin in the step (C) (Column 8, lines 1-4).

Regarding Claim 7, Vecchiarino shows the process as claimed as discussed above, including a method in which the first thermoplastic resin which portion comes in contact with the

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second molten thermoplastic resin comes into a re-melted state due to the contact thereof with the second molten thermoplastic resin in the step (C) (Column 6, lines 25-35; Column 8, lines 1-4).

Allowable Subject Matter

Claims 8-18 are allowed.

The following is an examiner's statement of reasons for allowance: Regarding Claims 8-12, the prior art of record neither teaches nor suggests the claimed injection molding method wherein a movable partition member is initially disposed between a first cavity portion that the first thermoplastic resin can occupy and a second cavity portion that the second thermoplastic resin can occupy; after injection of the first thermoplastic resin, the movable partition is extracted from the cavity, and then the second thermoplastic resin is injected into the cavity, followed by introduction of a pressurized fluid into the second thermoplastic resin. Regarding Claims 13-18, the prior art of record neither teaches nor suggests the claimed injection molding method wherein a movable partition member is initially disposed between a first cavity portion that the first thermoplastic resin can occupy and a second cavity portion that the second thermoplastic resin can occupy; after the second thermoplastic resin is injected, followed by the introduction of a pressurized fluid into the second thermoplastic resin, the movable partition member is extracted from the cavity, then the first molten thermoplastic resin is injected into the cavity.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with regard to multiple nozzle injection molding methods:

U.S. Patent 4,275,030 to Mares

U.S. Patent 6,063,315 to Keller et al.

U.S. Patent 6,368,093 to Vecchiarino et al.

U.S. Patent 3,475,413 to Siano

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A Fontaine whose telephone number is 703-305-7239.

The examiner can normally be reached on Monday-Friday 8:30am-5:00pm.

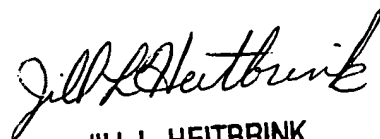
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill L. Heitbrink can be reached on 703-308-0673. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9310 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

maf

June 26, 2003



JILL L. HEITBRINK
PRIMARY EXAMINER

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6/27/03